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KAIZEN ENVIRONEWS

In This Issue.....

What is Air Pollution?

Air Pollution is the presence in the atmosphere of chemicals, particulate matter, or biological materials that cause harm or discomfort to humans or other living organisms, or damages to the environment. Air pollution can cause deaths and respiratory disease and is often identified with major stationary sources, however, the greatest source of emissions is mobile sources, mainly automobiles. Gases such as carbon dioxide, which contribute to global warming, have recently gained recognition as pollutants by climate scientists, while they also recognize that carbon dioxide is essential for plant life through photosynthesis.

http://www.lbl.gov/Education/ELSI/pollution-main.html

Indoor / Outdoor Air Quality

Indoor Air Quality (IAQ) deals with the content of interior air that could affect health and comfort of building occupants. The IAQ may be compromised by microbial contaminants (mold, bacteria), chemicals (such as carbon monoxide, radon), allergens, or any mass or energy stressor that can induce health effects. Using ventilation to dilute contaminants, filtration, and source control are the primary methods for improving indoor air quality in most buildings. ***Outdoor Air Quality*** deals with the condition of the air in the surrounding environment

Techniques for Analyzing Air Quality

Outdoor air quality can be analyzed by collection of air samples, as well as by the use of Outdoor Air Quality Monitoring Equipment. Indoor Air Quality Monitoring can be done by collection of air samples as well as samples on building surfaces and computer modelling of air flow inside buildings. The resulting samples can be analyzed for mold, bacteria, chemicals or other stressors. These investigations can lead to an understanding of the sources of the contaminants and ultimately to strategies for removing the unwanted elements from the air.

Sources of Air Pollution

Sources of air pollution refer to the various locations, activities or factors which are responsible for the releasing of pollutants in the atmosphere. These sources can be classified into two major categories which are:

Anthropogenic sources (human activity)

- "Stationary Sources" as smoke stacks of power plants, manufacturing facilities, municipal waste incinerators.
- "Mobile Sources" as motor vehicles, aircraft etc.
- Marine vessels, such as container ships or cruise ships, and related port air pollution.
- Burning wood,stoves, furnaces and incinerators .
- Oil refining, and industrial activity in general.
- Chemicals, dust and controlled burn practices in agriculture and forestry management.
- Fumes from paint, hair spray, varnish, aerosol sprays and other solvents.
- Waste deposition in landfills, which generate methane.
- Military, such as nuclear weapons, toxic gases, germ warfare and rocketry.

Natural sources

- Dust from natural sources, usually large areas of land with little or no vegetation.
- Methane, emitted by the digestion of food by animals, for example cattle.
- Radon gas from radioactive decay within the Earth's crust.
- Smoke and carbon monoxide from wildfires.

Effects of Bad Air Quality

- Increased hospitalizations and emergency room visits to treat severe symptoms of asthma and other respiratory problems
- More frequent absences from work and school
- Susceptibility to respiratory infections, such as flu and pneumonia
- Elevated risk of heart attack in people who have heart disease

Kaizen and Air Quality

The **PROJECTServices** division of Kaizen executes environmental consulting and contracting in the form of project works. This division has three service sections one of which is Measurement where services for AQM are carried out, this includes a 24-hr Call-Out/Rapid Response and continuous monitoring service for toxic organic / inorganic gases and particulates.

The Measurement section is fully supported by the **EnviroPRODUCTS** division of Kaizen, which comprises the sales and rental of sensing / monitoring equipment for detection and data acquisition, Kaizen has a complete selection of Portable and Fixed gas detection systems and leading brand personal gas monitors. These include, but are not limited to the following:

Genesis - Multi-Gas Detection Monitor

The Genesis, a personal, portable multi gas monitor, combines ease of operation with outstanding durability to deliver reliable performance in the most demanding environments.

MIRAN SapphIRe

The MIRAN SapphIRe Analyzers have the unique ability to specifically and accurately measure many gases with a single unit and is the most versatile gas detection systems in the market today.

TVA1000B (FID or FID/PID) Toxic Vapor Analyzer – Foxoboro

The TVA1000B is the only portable, intrinsically safe, survey flame ionization (FID) and photoionization (PID) dual monitor which provides fast and accurate readings of organic and inorganic vapors.

Crowcon Triple Plus +

This intrinsically safe portable multigas monitor has a combination of ruggedness, reliability, ease of use, and full flexibility of sensor combinations for flammable gases, oxygen and toxic gases.

Portable Gas

- Gastech Genesis 4-Gas Portable Monitors for H2S, HC, O2, CO & SO2
- HS-95 Personal / Portable H2S Monitors
- Gastech Screamer - Personal / Portable H2S Monitors
- MiniRAE 2000 - Volatile Organic Compound Detectors

AQM

- Staplex PM-10 Particulate Matter - 10 Micron
- Tisch TSP Air Sampler Total Suspended Particulate
- Crowcon NO, NO2, CO, H2S, SO2, O2 Monitors
- Thermo Miran Saphire Ambient Air Analyzer
- Foxboro Toxic Vapour Analyzer
- TSI DustTrack Portable Particulate Analyzers

For additional info. on AQM equipment visit our website at **www.kaizen-tt.com** & view **EnviroPRODUCTS**

What's New at EnviroPRODUCTS!!!

Schonstede XT Magnetic Locator

The ***Magnetic Locator*** detects the magnetic fields of all ferromagnetic objects-manholes, septic tanks, well casings, valve boxes, cast iron pipes, steel drums etc. as much as up to 16 feet underground. It is a one hand operation monitor with retractable extension, fingertip control for volume sensitivity and battery indicator. Battery life is 24 hrs with intermittent usage and the waterproof length is 11.5 inches. There is no response to aluminum, brass or copper. It is lightweight, simple to understand and easy to use. There is also a battery indicator for low battery, an audio output indicated by a high frequency with respect to ferromagnetic material and a visual display which shows expanding bar graphs relative to signal strength.

Roto-Sure Deluxe Measuring Wheel

The ***Measuring Wheel*** is used to measure distances, and is used for road marking, construction, paving, fencing, pool buildings, sports fields, traffic control, property assessment etc. It is accurate to 99%, easy to read, fold down capable for easy storage and has a kick down side stand for upright unattended posture. There is a trigger brake to stop rolling, it measures up to 9999.9 meters, push button zero reset, convenient carry handle & runs down a straight line. It is also heavy duty for outdoor use with good traction surfaces.

Kaizen Sponsors the La Brea United Football Academy

The La Brea United Football Academy has been in existence for the past three (3) years and comprises of five (5) age groups U-10, U-12, U-14, U-16,U-20 The academy falls under the umbrella body of the La-Brea Sport Foundation and is headed by Mr. Lyndon Cave & Mr. Larry Joseph and has it's own coaching staff.

With approximately 120 youngsters participating in all age groups, it has been a remarkable initiative for the youths of the La Brea community and Kaizen is very proud to be a part of this by sponsoring the U-10 and U-12 programs.

KAIZEN
Environmental

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